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10/680,345	10/08/2003	Daniel Amyot	1244.43183X00	5635

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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

WHIPPLE, BRIAN P

ART UNIT	PAPER NUMBER
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2196

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/680,345

Applicant(s)

AMYOT ET AL.

Examiner

Brian P. Whipple

Art Unit

2196

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/8/2003 and 2/25/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-14 are pending in this application and presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the United Kingdom on 10/17/2002. It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled

Art Unit: 2196

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1, 10, and 11 lack antecedent basis:
 - a. "said feature specification errors," claim 1, ln. 8; claim 10, ln. 1-2;
 - b. "said interaction," claim 11, ln. 4.
6. Claim 1 contains more than one period (see ln. 14-15). Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman et al. (Lineman), U.S. Publication No. 2003/0065942 A1, in view of Ahlstrom et

Art Unit: 2196

al. (Ahlstrom), U.S. Patent No. 6,327,618 B1, in view of Cookmeyer, II et al.

(Cookmeyer), U.S. Patent No. 6,529,954 B1.

9. As to claim 1, Lineman discloses a method of user policy management in a communication system, comprising: receiving user-entered policies in a user-understandable representation capable of translation into a formal executable language ([0028], ln. 3-6; [0032], ln. 4-6; [0033], ln. 1-5; [0053], ln. 7-14);

translating said policies from said user-understandable representation into an executable feature language capable of execution by said communication system ([0033], ln. 1-5; [0034], ln. 1-7; [0053], ln. 7-14);

translating said policies from said executable feature language into a policy language ([0037], ln. 1-8; [0056], ln. 3-6; the communication of the XML file to machine-readable code for use by the computer systems may be interpreted as translating the executable feature language into a policy language) and

re-integration of said policies in said executable feature language ([0035], ln. 3-7; [0057], ln. 8-13; the contents of the XML file, the policy, had to be communicated as machine-readable code, a policy language, between computer systems across the network and subsequently re-integrated into an XML file on the receiving side, the user-end, of the network, this may be interpreted as re-integrating the policy into an executable feature language); and

uploading said policies for execution by said communication system ([0035], ln. 1-7; [0037], ln. 1-8).

Art Unit: 2196

Lineman does not disclose detecting common feature interaction errors between said policies;

analyzing said feature specification errors to identify errors that are common to naive users;

reporting said errors that are common to the user in said user-understandable representation;

providing the user with a recommendation for correction of said feature interaction errors.

Ahlstrom does disclose detecting common feature interaction errors between said policies (Abstract, ln. 1-3);

analyzing said feature specification errors to identify errors that are common to naive users (Col. 5, ln. 64-67; Col. 6, ln. 1-2);

reporting said errors that are common to the user in said user-understandable representation (Col. 9, ln. 13-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman by detecting, analyzing, and reporting common feature interaction errors to a user as taught by Ahlstrom in order to allow the user to remove a conflict from conflicting policies (Ahlstrom, Col. 5, ln. 64-67; Col. 6, ln. 1-2).

Lineman and Ahlstrom do not disclose providing the user with a recommendation for correction of said feature interaction errors.

Cookmeyer does disclose providing the user with a recommendation for correction of said feature interaction errors (Col. 23, ln. 5-9 & 16-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman and Ahlstrom by providing the user with a recommendation for correction of feature interaction errors as taught by Cookmeyer in order to provide recommendations for resolution when the user is unable to solve the problem (Cookmeyer, Col. 23, ln. 25-27).

10. As to claim 2, Lineman further discloses said user-understandable representation is a Web browser interface (Fig. 10B; [0057], ln. 10-13).

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Cookmeyer as applied to claim 1 above, and further in view of Glitho et al. (Glitho), U.S. Patent No. 6,940,847 B1.

12. As to claim 3, Lineman, Ahlstrom, and Cookmeyer do not disclose said executable feature language is Call Processing Language (CPL).

However, Glitho does disclose said executable feature language is Call Processing Language (CPL) [Col. 2, ln. 48-50].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Cookmeyer by utilizing Call

Art Unit: 2196

Processing Language as taught by Glitho in order to use a standard known in IP telephony (Glitho, Col. 2, ln. 45-50).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Cookmeyer as applied to claim 1 above, and further in view of Gorse, The Feature Interaction Problem: Automatic Filtering of Incoherences & Generation of Validation Test Suites at the Design Stage (Gorse).

14. As to claim 4, Lineman, Ahlstrom, and Cookmeyer do not disclose said policy language is Feature Interaction Analysis Tool (FIAT).

However, Gorse does disclose said policy language is Feature Interaction Analysis Tool (FIAT) [Pg. 67, ¶ 2, ln. 1-7; the instant disclosure defines Gorse's tool as FIAT, see pg. 9, ln. 18-22].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Cookmeyer by utilizing Feature Interaction Analysis Tool as taught by Gorse in order to analyze incoherences and generate reports (Gorse, Pg. 67, ¶ 2, ln. 2-3).

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Cookmeyer as applied to claim 1 above, and further in view of Moaven et al. (Moaven), U.S. Publication No. 2002/0184535 A1, and further in view of Rychel et al. (Rychel), U.S. Publication No. 2002/0198892 A1.

16. As to claim 5, Lineman further discloses said step of receiving user-entered policies in said user-understandable representation further comprises receiving user-entered operations on said policies, including: Create: for creating and activating a new policy ([0032], ln. 4-6);

Modify: for modifying a selected policy (Fig. 5A; [0032], ln. 4-6; [0048], ln. 9-14);

Duplicate: for making a copy of a selected policy ([0042], ln. 11-14).

Ahlstrom further discloses Set Priority: for setting priority of a selected policy to one of either an absolute priority or a relative priority (Col. 5, ln. 64-67; Col. 6, ln. 1-2; Col. 9, ln. 29-37);

Validate: for detecting and reporting conflicts among active ones of said policies (Fig. 2A, items 202, 206, 208, and 210; Col. 5, ln. 64-66; Col. 9, ln. 42-44; Col. 10, ln. 6-8, 20-22, and 29-31);

Approve: for approving and enabling selected policies for execution (Fig. 2A, items 208 and 215-216; Col. 10, ln. 38-41 and 63-67).

Lineman, Ahlstrom, and Cookmeyer do not disclose Delete: for deleting a selected policy;

Deactivate: for deactivating a selected policy;

Activate: for activating a selected inactive policy.

However, Moaven does disclose Delete: for deleting a selected policy ([0062], ln. 6-8);

Art Unit: 2196

Deactivate: for deactivating a selected policy ([0062], In. 6-8; deleting a policy may be interpreted as deactivating a policy).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Cookmeyer by allowing a user to delete and deactivate policies as taught by Moaven in order to remove policies that are no longer needed or desired.

Lineman, Ahlstrom, Cookmeyer, and Moaven do not disclose Activate: for activating a selected inactive policy.

However, Rychel does disclose Activate: for activating a selected inactive policy ([0064], In. 14-17; the configuration of options may be interpreted as a policy).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Cookmeyer, and Moaven by allowing a user to activate a selected inactive policy as taught by Rychel in order to activate a policy that is once again needed or desired.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Cookmeyer as applied to claim 1 above, and further in view of Chiang, U.S. Publication No. 2002/0103895 A1.

18. As to claim 6, Lineman further discloses each said policy includes: a name for use as a unique identifier ([0073], In. 1-3).

Art Unit: 2196

Ahlstrom further discloses a priority, expressed as a numerical value (Col. 9, In. 34-37; a partial order of all policies may be interpreted as numerical values);

an operation, for application to a call within said communication system (Col. 6, In. 34-41; communication between a source and destination may be interpreted as a call);

a precondition, based on characteristics of a caller or callee, whereby said policy is general in the event that the precondition is a domain of values, and is specialized in the event that the precondition relates to particular values (Col. 6, In. 38-41; Col. 7, In. 14-20);

a target, for said operation (Col. 7, In. 55);

and a time constraint, during which the policy is active (Col. 6, In. 38-41).

Lineman, Ahlstrom, and Cookmeyer do not disclose an optional list of exceptions to said precondition in the event that that said policy is general.

However, Chiang does disclose an optional list of exceptions to said precondition in the event that that said policy is general ([0035], In. 4-10; [0036], In. 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Cookmeyer by utilizing an optional list of exceptions to a precondition in a general policy in order to allow exceptions such as allowing unlimited access bandwidth in an environment that would normally limit bandwidth (Chiang, [0035], In. 6-9).

Art Unit: 2196

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, Cookmeyer, and Chiang as applied to claims 1 and 6 above, and further in view of Wiegel, U.S. Patent No. 6,484,261 B1.

20. As to claim 7, Lineman, Ahlstrom, Cookmeyer, and Chiang do not disclose individual ones of said policies are translated into said executable feature language as scripts representing individual branches of a decision tree, with explicit priorities allocated among said branches.

However, Wiegel does disclose individual ones of said policies are translated into said executable feature language as scripts representing individual branches of a decision tree (Col. 14, ln. 12-17 and 20-29), with explicit priorities allocated among said branches (Col. 10, ln. 1-15 and 33-36; Col. 14, ln. 7-11; it may be interpreted that the creation of the security policies by the user, through the use of a graphical display of the decision tree, allows the user to explicitly allocate priorities among said branches, as a decision tree considers branches in the order defined).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Cookmeyer, and Chiang by translating policies into an executable feature language as scripts representing individual branches of a decision tree with explicit priorities allocated among the branches as taught by Wiegel in order to provide users with a intuitive and logical method for defining policies (Wiegel, Col. 10, ln. 33-36) and arrange a policy that compares relative importance of different aspects of itself (Wiegel, Col. 14, ln. 7-11).

21. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, Cookmeyer, Chiang, and Wiegel as applied to claims 1 and 6-7 above, and further in view of Bell et al. (Bell), U.S. Patent No. 6,880,005 B1.

22. As to claim 8, Lineman, Ahlstrom, Cookmeyer, Chiang, and Wiegel do not disclose said priorities are allocated by numerically naming the individual branches.

However, Bell does disclose said priorities are allocated by numerically naming the individual branches (Fig. 3; Col. 4, ln. 36-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Cookmeyer, Chiang, and Wiegel by numerically naming individual branches to allocate priority as taught by Bell in order to easily identify the priority of each branch.

23. As to claim 9, Wiegel further discloses said step of translating said policies from said executable feature language into said policy language further comprises visiting successive ones of said branches downwardly and producing corresponding rules, using the following mapping (Col. 1, ln. 44-47; Col. 10, ln. 25-28; Col. 14, ln. 27-31):

Lineman, Ahlstrom, and Chiang further disclose the table included in claim 9 (see the rejection of claim 6 above).

Art Unit: 2196

24. As to claim 10, Ahlstrom further discloses said step of analyzing said feature specification errors to identify errors that are common to naive users further includes determining whether each said policy is general or specialized (Col. 6, In. 38-41; Col. 7, In. 14-20) and then comparing relative priorities of said policies (Col. 5, In. 64-67; Col. 6, In. 1-2).

25. As to claim 11, Ahlstrom further discloses said step of reporting said errors further includes identifying a category of incoherence, assigning a role of each policy in the occurrences of said errors, and providing an example of possible misbehaviour resulting from said interaction (Col. 10, In. 21-23 and 53-62; finding a policy conflict may be interpreted as identifying a category of incoherence; reporting potential conflicts in a "what if" scenario may be interpreted as providing examples of possible misbehavior).

26. As to claim 12, Ahlstrom further discloses said errors that are common to naive users and are reported in said reporting step include (Col. 9, In. 13-14):

Redundancy: whereby two general policies are active (Col. 8, In. 40-42 and 44-46);

Shadowing: whereby a general policy overrides a specific policy such that the specific policy can never be triggered (Col. 8, In. 43 and 46-48);

Conflict: whereby two policies have overlapping preconditions but with different resulting actions (Col. 9, In 20-25).

Art Unit: 2196

Bell further discloses Specialization: whereby a specific policy is selected over a general policy of lower priority (Fig. 3; Col. 3, ln 3-25).

27. As to claim 13, Chiang further discloses said Redundancy error includes a Conflict with Redundancy error whereby a general policy and an exception for the other general policy lead to different resulting actions ([0035], ln. 4-10; [0036], ln. 1-2).

28. As to claim 14, Ahlstrom further discloses said step of providing the user with a recommendation for correction of said feature interaction errors includes the following suggestions: edit a policy (Col. 9, ln. 29-30);

disable a policy (Col. 6, ln. 49-53; Col. 10, ln. 32-35; deleting the relations from a policy disables the policy);

set the priority of a first policy above or below the priority of a second policy (Col. 9, ln. 30-37);

tolerate the interaction and no longer report it (Col. 9, ln. 30-37; assigning relative priorities, but allowing both policies to remain active may be interpreted as tolerating the interaction; the interaction will no longer be reported if prioritization has occurred).

Chiang further discloses add an exception to a general rule ([0035], ln. 4-10; [0036], ln. 1-2).

Conclusion

Art Unit: 2196


29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571)270-1244. The examiner can normally be reached on Mon-Thu (7:30 to 5), Fri (7:30 to 4 or day off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571)272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPW

Brian P. Whipple
1/2/07


NABIL M. EL-HADY
SUPERVISORY PATENT EXAMINER